TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 9, 2010

TO:

Internal File

THRU:

Jim Smith, En Sci III, Permit Supervisor / Task Manager De Division Steve Christenson En Sci III P

Steve Christensen, En Sci III, Reclamation Hydrologist / Team Lead

FROM:

Peter Hess, En Sci III, Reclamation Cost Estimate Review

PHH by S&S

RE:

MIDTERM PERMIT REVIEW, Canyon Fuel Company, LLC, Dugout

Canyon Mine, C/007/039, Task ID # 3660

SUMMARY:

The Division initiated a review of the Dugout Canyon Mine mining and reclamation plan midway through the term of the current State permit issued by the Division of Oil, Gas, and Mining on July 15, 2010. At that time the Permittee had not provided any updated unit cost information from which to determine if the direct costs associated with the demolition, backfilling and grading and revegetation would increase the reclamation cost estimate.

The Division generated a deficiency under R645-301-830.140, requiring the Permittee to submit a revised reclamation estimate using 2010 unit costs. The Permittee responded to the Division on October 14, 2010. The Division identified that response and its subsequent Division review as Task ID # 3660.

This memo will determine the adequacy of the Permittee's October 13, 2010 response.

RECLAMATION PLAN

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

The amount of disturbance associated with the Dugout Canyon Mine amounts to 104.7 acres, and includes the main mine facilities, the Pace Canyon fan portal facilities and approximately thirty degasification wells which were determined as being necessary to reduce combustible gas volumes to acceptable levels allowing the coal reserves to be mined. The amount of reclamation bond in place to ensure the adequate reclamation of these areas amounts to \$3,550,000.00.

Form of Bond

The bond which is currently held by the State of Utah / Divison of Oil, Gas and Mining for the \$ 3,550,000 amount is a surety bond issued by the Argonaut Insurance Company. The surety number is SUR0000326 (A).

Determination of Bond Amount

The Permittee submitted one page of an adjusted reclamation cost estimate using an escalation factor of 1.016 rather than 1.005. This is not how the Division updates the direct costs for demolition of the sites numerous factilities, the direct costs for backfilling and grading, or revegetation of the disturbed area acreages.

In accordance with the requirements of

R645-301-830.140, the Permittee must submit <u>a detailed</u> estimated cost, <u>with supporting calculations for the estimates (using current unit costs for 2010).</u>

The Division always updates the reclamation cost estimate using unit costs determined from established sources such as the R.S. Means Heavy Construction Cost Data manual, and the Caterpillar Handbook for equipment productivity rates. Current rates for 2010 must be used in determining the new reclamation cost estimate. There are reclamation activities which do not always have costs established for them in R.S. Means. When that occurs the Division may use an hourly rate provided by local construction companies. The cost data is confirmable, and that is the biggest concern of the Division.

Using these costs, and the OSM approved escalation rate of 1.005, the new reclamation cost estimate can be determined. Indirect costs are still calculated using the same percentages used in years past.

Findings:

In accordance with the requirements of

R645-301-830.140, the Permittee must submit <u>a detailed</u> estimated cost, <u>with supporting calculations</u> for the estimates (using current unit costs for 2010).

Each surface structure must have a detailed removal cost, including concrete disposal, and associated equipment usage with current rates.

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